

EPA Strengthens Drinking Water Protection

Effective March 6, the U.S. Environmental Protection Agency has amended the National Primary Drinking Water regulations by adding two new rules. The first was designed to decrease the incidence of gastrointestinal illnesses caused by microbial contaminants and the second aims to reduce potential cancer risks associated with disinfectant byproducts in drinking water.

The "Long Term 2 Enhanced Surface Water Treatment Rule" (LT2) requires public water systems that are supplied by surface water sources to monitor for *Cryptosporidium*, a waterborne pathogen. Water systems that measure higher levels of *Cryptosporidium* or do not filter their water must provide additional protection by using treatment and management options such as ultraviolet disinfection and watershed control programs. The rule also requires open reservoirs used to store treated drinking water either to be covered or receive added treatment.

The "Stage 2 Disinfection Byproducts Rule" (Stage 2 DBP) was developed to balance the benefits and risks posed by drinking water disinfection. While disinfection is critical to public health, chlorine and other disinfection compounds can create harmful byproducts when they combine with naturally occurring materials in water. Under the rule, water systems are required to find monitoring sites where higher levels of DBPs are likely to occur and use these new locations for compliance monitoring. If DBPs are found to exceed drinking water standards at any of these new monitoring locations, water systems must begin to take corrective action.

Stage 2 DBP is expected to cause about 70 percent of the water systems in the country to either change the amount of chlorine used or to switch from using chlorine altogether, according to the *Los Angeles Times*. For example, the Metropolitan

Water District of Southern California is converting its five treatment plants to ozone systems at the cost of \$856 million. LT2 has a significant effect on the Los Angeles Department of Water and Power (DWP), which has the country's largest open reservoir system to store treated water, said the *Times*. DWP already has converted four of its 10 open reservoirs to hold untreated water for emergency use, and local communities will help decide what to do with the remainder. Meanwhile, the newspaper reported, underground tanks and larger-capacity distribution pipes are being installed, and plans are being made to transport more water directly from treatment plants to customers.

The final rules were published in the Federal Register Jan. 4-5, 2006 (see www.gpoaccess.gov/fr/). Copies and additional information can be found at www.epa.gov/safewater/disinfection/.

Arsenic Compliance Help from EPA

As of Jan. 23, drinking water systems must comply with a more stringent arsenic standard of 10 parts per billion. Many water utilities were not expected to meet the new standard immediately. To help them, EPA has released a set of multimedia products. Designed to help owners and operators make sound treatment decisions, the anchor product is the Arsenic Virtual Trade Show, a learning portal for arsenic-treatment technology. The website features a database of vendors, a treatment "decision tree," and tips for evaluating and selecting treatment providers.

Other products include a brochure containing a checklist of questions that small utility owners and operators should ask treatment providers; a CD-ROM that is a companion to recent arsenic-training workshops; and a DVD collection of videos that highlight arsenic treatment technologies currently being pilot-tested through EPA's Arsenic Treatment Technology Demonstration Program.

EPA has also updated its website to reflect the latest consumer and technical

information. Kits that include all of the new arsenic tools will be delivered to EPA's state and technical assistance partners for distribution to public water systems affected by the arsenic regulation.

To launch the Arsenic Virtual Trade Show, go to www.arsenictradeshow.org. More information about arsenic and drinking water is at www.epa.gov/safewater/arsenic.

Huge Arizona Land Swap Approved

On Nov. 22, 2005, President Bush signed into law the Northern Arizona Land Exchange and Verde River Basin Partnership Act of 2005, known as the "Yavapai Land Exchange," providing a framework for the exchange of about 50,000 acres of private and public land in northern Arizona in order to consolidate the largest remaining checkerboard ownership in the state.

The bill preserves 25,000 acres in the headwaters area of the Verde River and facilitates the voluntary exchange of public and private lands to consolidate them into contiguous parcels that follow natural boundaries, according to Arizona Senator Jon Kyl, one of the bill's backers.

Among the most important benefits of the bill, said Kyl, are its provisions to improve water resources management in the area. The bill establishes a conservation easement on the Camp Verde General Crook parcel, which limits water use after private acquisition to 300 acre-feet per year. The bill also facilitates the creation of a new Verde River Basin Partnership among federal, state, and local stakeholders. The partnership will be authorized to receive federal assistance to develop scientific and technical data needed to determine sustainable long-term water management policies.

The *Arizona Republic* said the deal is the largest U.S. Forest Service land exchange in Arizona in 50 years. A key party to the deal is Yavapai Ranch owner Fred Ruskin, who plans to "turn over about 35,000 acres southeast of Seligman to Prescott

National Forest in return for federal land scattered throughout the Coconino and Prescott national forests, mostly near or in cities,” said the *Republic*. Ruskin’s plans for his new land include a new shopping center and homes; selling a right-of-way for a highway bypass; donating some land for open space; and selling land to the cities of Flagstaff and Williams for airport expansions and other municipal developments, including a new wellfield for Williams, according to the paper.

Although the idea of consolidating Forest Service land has widespread support, not everyone was in favor of the deal. Diane Joens of the Cottonwood City Council told the *Republic* that the Verde Valley does not have enough water to support a new development.

Visit kyl.senate.gov and www.azcentral.com.

Walker Lake Benefits from Energy & Appropriations Bill

Walker Lake in western Nevada is the beneficiary of \$95 million in federal funding approved in the 2002 Farm Bill and made available as part of the 2006 Energy and Appropriations bill. Of that amount, \$70 million is earmarked to the University of Nevada to acquire land and water in the Walker River Basin and to establish and administer an agricultural and natural resources center designed to develop innovative agricultural water conservation techniques, cooperative programs for environmental restoration, and other programs.

In addition, \$10 million is designated for a water lease and purchase program for the Walker River Paiute Tribe. Another \$10 million is to be used for tamarisk eradication, riparian area restoration, and channel restoration efforts within the basin to enhance flows to Walker Lake, and \$5 million was appropriated to the U.S. Fish and Wildlife Service, the Walker River Paiute Tribe, and the Nevada Division of Wildlife to design and implement

the Western Inland Trout Initiative and Fishery Improvements within Nevada.

Walker Lake is a desert terminal lake that has been dramatically impacted by diversions, reservoirs, and groundwater pumping over the last 150 years (see *Southwest Hydrology*, Jul/Aug 2004). As a result, about 50,000 acre-feet per year more water is now consumed within the basin than is available, lake elevations have fallen about 120 feet over the last century, and high water salinity threatens fish populations.

The language of the bill is accessible at thomas.loc.gov.

New Mexico Water Quality Data Now Online

The New Mexico Environment Department recently unveiled a new website for information on public drinking water systems in the state. The site contains water quality testing results for all drinking water systems back to 1993 and is updated every two weeks. In addition, the number of customers the utility serves, contact information for water system officials, and information on past violations or enforcement actions are available. The site can be searched by the name of the water system, or by town, county, or other data.

The website is www.safewater.state.nm.us.

City and Tribe Initiate Long-Term Water Lease

In the summer of 2004, the Santa Fe, New Mexico City Council and the Jicarilla Apache Tribal Council signed an agreement in which Santa Fe may lease up to 3,000 acre-feet per year of Jicarilla’s 6,500 acre-foot allocation of San Juan/Chama diversion water, beginning in 2007. The federal government did not sign off on the agreement until more than a year later, but in November 2005, the first payment—\$450,000—of what could ultimately be \$75 million over 50 years was made by Santa Fe Mayor Larry

Delgado to the Jicarilla Apache Nation, according to *The [Santa Fe] New Mexican*. Jicarilla officials said this was the first such long-term water lease between an American Indian tribe and a municipality. The November payment represented a holding fee to keep the water rights off the market for 2004 and 2005; an additional \$300,000 will be paid for 2006, said the paper. In 2007, Santa Fe will begin paying the tribe \$1.5 million per year for the water, a rate agreed upon by the city as fair market value of \$500 per acre-foot per year, reported *The New Mexican*.

Visit www.sfnwmexican.com.

West Texas Needs More Water

Texas Agriculture Commissioner Susan Combs says her state’s population is expected to double by 2050 and not enough water currently is available to supply the new residents, according to the *Midland Reporter-Telegram*. Combs spoke last fall at a forum titled “Aquifers and Acrobats: West Texas Water Policies.” She told the audience that \$108.6 billion will be needed for new water, wastewater, and stormwater infrastructure, the paper reported. Agricultural water use is less of a concern; it is declining due to rising energy costs and improved irrigation efficiency.

The *Reporter-Telegram* said Combs attributed part of the current concern to the failure of Senate Bill 3 to pass in 2005, which would have provided funding support to groundwater conservation districts. The Texas Legislature only meets every other year, so the next hope for water-related funding is not until 2007.

Kevin Ward, executive administrator of the Texas Water Development Board said at the meeting that desalination and treatment of brackish water are attractive potential future water sources for the state, reported the newspaper. Reclaimed water also was mentioned as a means to expand the existing water supply.

Visit www.texaswatermatters.org.